

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT (PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6013-138 PCT	<div style="display: flex; justify-content: space-between;"> <div>FOR FURTHER ACTION</div> <div>see Form PCT/ISA/220 as well as, where applicable, item 5 below.</div> </div>	
International application No. PCT/CA2004/001413	International filing date ( <i>day/month/year</i> ) 28 July 2004 (28-07-2004)	(Earliest) Priority date ( <i>day/month/year</i> ) 29 July 2003 (29-07-2003).
Applicant UNIVERSITE LAVAL ET AL		
This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.		
<p>This international search report consists of a total of <u>3</u> sheets.</p> <p><input checked="" type="checkbox"/> It is also accompanied by a copy of each prior art document cited in this report.</p> <p><b>1. Basis of the report</b></p> <p>a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.</p> <p style="padding-left: 40px;"><input type="checkbox"/> the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).</p> <p>b. <input checked="" type="checkbox"/> With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.</p> <p>2. <input type="checkbox"/> Certain claims were found unsearchable (See Box II).</p> <p>3. <input type="checkbox"/> Unity of invention is lacking (See Box III).</p> <p>4. With regard to the title.</p> <p style="padding-left: 40px;"><input checked="" type="checkbox"/> the text is approved as submitted by the applicant.</p> <p style="padding-left: 40px;"><input type="checkbox"/> the text has been established by this Authority to read as follows :</p> <p>5. With regard to the abstract.</p> <p style="padding-left: 40px;"><input checked="" type="checkbox"/> the text is approved as submitted by the applicant.</p> <p style="padding-left: 40px;"><input type="checkbox"/> the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.</p> <p>6. With regard to the drawings;</p> <p>a. The figure of the drawings to be published with the abstract is Figure No.</p> <p style="padding-left: 40px;"><input type="checkbox"/> as suggested by the applicant.</p> <p style="padding-left: 40px;"><input type="checkbox"/> As selected by this authority, because the applicant failed to suggest a figure.</p> <p style="padding-left: 40px;"><input type="checkbox"/> As selected by this Authority, because this figure better characterizes the invention.</p> <p>b. <input checked="" type="checkbox"/> None of the figures is to be published with the abstract.</p>		

**INTERNATIONAL SEARCH REPORT**International application No.  
PCT/CA2004/001413**Box No. I**      **Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)**

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - ☒ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material
    - ☒ in written format
    - ☒ in computer readable form
  - c. time of filing/furnishing
    - ☒ contained in the international application as filed
    - ☒ filed together with the international application in computer readable form
    - ☐ furnished subsequently to this Authority for the purposes of search
2. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/001413

## A CLASSIFICATION OF SUBJECT MATTER

IPC(7): C12Q-1/68, G01N-33/50, G01N-33/68

## B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC(7): C12Q-1/68, G01N-33/50, G01N-33/68; U.S. 435/6

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Canadian Patent Database, GenBank, SwissProt

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used)  
EPOQUE, NCBI Pub-Med, Delphion; keywords: neuromedin, NMB, mutation, obesity, eating, anorexia, bulimia

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	OEFFNER, F. et al. Significant association between a silent polymorphism in the neuromedin B gene and body weight in German children and adolescents. Acta Diabetol. 2000, Vol. 37, No.2, pages 93-101, ISSN 0940-5429.	1, 4, 6, 7
Y	-the entire document, particularly the abstract, p.97 column 2, Tables 2 & 3, p.99	2, 3, 5, 8-11
A	KRANE, I.M. et al. Molecular cloning of cDNAs encoding the human bombesin-like peptide neuromedin B. J. Biol. Chem. September 15, 1988, Vol. 263, No.26, pages 13317-13323, ISSN 0021-9258.	1-11
A	GREGORY, C.A. and SCHWARTZ, J.S. The cDNA of the human neuromedin B gene (NMB) mapped to 15q11-qter recognizes an XbaI RFLP. Nucleic Acids Res. March 11, 1991, Vol. 19, No.5, page 1167, ISSN 0305-1048.	1-11
A	GREGORY, C.A. et al. Somatic recombination rather than uniparental disomy suggested as another mechanism by which genetic imprinting may play a role in the etiology of Prader-Willi syndrome. Hum. Genet. November 1991, Vol. 88, No.1, pages 42-48, ISSN 0340-6717.	1-11

Further documents are listed in the continuation of Box C.

Patent family members are listed in annex.

\* Special categories of cited documents :  
 "A" document defining the general state of the art which is not considered to be of particular relevance  
 "E" earlier application or patent but published on or after the international filing date  
 "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
 "O" document referring to an oral disclosure, use, exhibition or other means  
 "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
 "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
 "&" document member of the same patent family

Date of the actual completion of the international-type search  
23 November 2004 (23-11-2004)

Date of mailing of the international-type search report  
07 January 2005 (07-01-2005)

Name and mailing address of the ISA/CA  
 Commissioner of Patents  
 Canadian Patent Office - PCT  
 Ottawa/Gatineau K1A 0C9  
 Facsimile No. 1-819-953-9358

Authorized officer  
 Michael W. De Vouge (819) 997-2952